advanced technologies by the competitive long-distance carriers. The price-cost margin has declined to close to its competitive minimum.

178. The force of competition among the four major long-distance carriers (AT&T, MCI, Sprint, and WorldCom) and dozens of other significant carriers has pushed prices down to the level where only an efficient firm with perceptive management can make a profit. But competition in long distance does not take the precise form of textbook perfect competition. For example, AT&T's brand name and consumer inertia dating back to the time when the company was a monopoly gives a continuing, though declining, advantage to AT&T.

179. After divestiture provided the opportunity for full competition in the long-distance market in the United States, competition acted quickly to lower prices. Increasing competition and rising productivity were driving forces, along with declining access charges, in lowering long-distance prices. The decline in the price of long distance was most rapid just after divestiture, but has continued since 1987. The economic analysis of the benefits of competition teaches that competition will drive prices toward the level of cost. During the transition from noncompetitive prices to competitive prices, large price reductions will occur. After the benefits of competition are achieved, the economy continues to enjoy low prices but cannot expect prices to continue falling at their earlier rate. Future declines in long-distance prices will come from continuing improvements in productivity and from any further declines in access charges that are granted by regulators or that result from structural changes in local telephone service.

180. In my opinion, the performance of the industry suggests vigorous competition with large consumer benefits even though AT&T still has about half of the U.S. long-distance market. There are neither natural barriers to entry nor barriers created by law in the market. If competition were inadequate, new firms would enter and those currently on the periphery would move into the core.

181. The Bells' economists have argued that the long-distance industry is distinctly non-competitive. The particular form of non-competitive organization that they diagnose is tacit collusion. In this view, each long-distance carrier is willing to stick to high prices because there is an understanding that the others will keep their prices high as well. However, the Bells' economists cite no evidence of actual collusion. The diagnosis of tacit collusion makes little sense for an industry with numerous sellers, many of whom are small enough to avoid any strategic response from the four major sellers, but collectively large enough to

exploit any gap between price and cost. These sellers—currently ranked number 5 and smaller—have grown collectively in recent years and now account for an important share of the total market.

J. The Bells' Potential to Increase Competition in Long Distance

182. A major issue in evaluating a Bell proposal to enter long distance is the current performance of the long-distance industry. My conclusion, stated above, is that the performance of the industry has been outstanding since competition became effective. Although the long-distance industry does not entirely fit the model of textbook perfect competition, long-distance customers have enjoyed sharply declining prices and improved service, and the market satisfies the standard of highly workable competition.

183. In view of the absence of barriers to entry and the absence of abnormal profit in the industry, there simply is no important market power left for a Bell to compete away. Since divestiture, the entry of numerous sellers has competed away the profit opportunities that previously existed.

184. As a result, standard economic analysis concludes that a Bell's control of a long-distance subsidiary in its in-region market would not increase the number of long-distance carriers in that market in the long run. Entry is driven by potential profit, and industry equilibrium occurs at the point where there are sufficiently many sellers so that the incremental profit to one more seller is zero. The number of sellers is determined by this condition. Consequently, if a Bell enters a particular market, it means that there will be one fewer other seller in the market in equilibrium. Price and quantity are the same whether the equilibrium includes the Bell or not.

V. The Net Assessment: Little to Gain, Much to Lose

185. My analysis of the impact of a Bell's control of a long-distance subsidiary relies on the analysis and factual conclusions presented earlier in this declaration. There are two major issues: (1) the benefits to the consumer from the Bell's possible role in increasing competition in the long-distance market,

and (2) the harm that would result from the breakdown in cooperation in the telephone system as a result of the Bell's dominant position in providing access services. Part IV provided the basis for my conclusion that the long-distance consumer has little to gain from the addition of a Bell to the long list of sellers already present in the long-distance market. Part II discussed the Bells' dominance of access markets and the limited role that local telephone competition is likely to play in the next few years in constraining the Bells' conduct with respect to their long-distance rivals. Material in Part III provided the analytical framework and factual background for my conclusion that a Bell's presence in the long-distance market in the Bell's own region is a threat to consumer welfare in that market.

186. As I noted in Part III, the purpose of the existing policy of structural separation is to ensure cooperation between the local carriers and the downstream long-distance carriers, who are dependent on the local carriers. One reason for changing the policy might be that the need for cooperation has declined. But trends in telecommunications appear to be sharply in the opposite direction. As the telephone network becomes more sophisticated, the amount of technical information about the local network and interaction between the local network and the long-distance carrier is becoming greater. To put it differently, the consequences to a long-distance carrier of lack of cooperation from a local carrier are greater today than in 1982 when the decision to impose structural separation was made. As soon as a local carrier such as Ameritech or SNET controls a long-distance subsidiary, the local carrier will owe its shareholders a duty of non-cooperation with its rivals in long distance. Competing with rivals, not helping them, is a central principle of the American economy.

187. The premise that vertical integration is a danger to the long-distance consumer is embodied in the Telecommunications Act of 1996, which requires that local competition reach a threshold level before a local carrier is permitted to control a long-distance subsidiary. As I concluded in Part II, local competition is far short of that threshold. Except for large businesses, few telephone customers can turn to alternative sellers of access services to avoid the adverse effects of a Bell's withdrawal of cooperation once it controls its own long-distance subsidiary.

188. Both the actual experience with local telephone companies' activities in long distance and local toll and an analysis of the structure and performance of the existing long-distance market agree that the consumer has almost nothing to

gain from a local telephone company's control of a long-distance subsidiary. In both local toll and long distance, local phone companies are the high-price sellers. We have little to gain, and much to lose from allowing the local telephone companies to enter the long-distance business serving their local customers.

VI. Discussion of Analyses Performed by BellSouth's Experts

A. Professor Jerry Hausman

189. Professor Hausman concludes that entry by BellSouth into long distance will benefit the telephone consumer because BellSouth will have incentives to continue to cooperate with its rivals in the long-distance business and to compete in the long-distance market in a way that lowers prices.[32] Additionally, he concludes that in other countries, many of which have introduced competition into long distance but have chosen to allow the historical telephone company to control a long-distance subsidiary, prices are below those in the United States. He compares Canada to the United States, in particular.

190. In support of his conclusion that long-distance prices will decline if BellSouth is permitted to control a long-distance subsidiary, Hausman cites the theory of double marginalization. Oddly, Hausman develops this analysis from scratch and does not cite or benefit from the work of his MIT colleagues, Richard Schmalensee (see below) and Franklin Fisher,[33] nor the work of other economists who have considered this subtle topic. It is true, as Professor Hausman indicates, that if a monopoly upstream firm merges with a monopoly downstream firm, and the two firms do not use efficient two-part pricing for the intermediate product, then merger of the two firms will result in a lower price to the consumer of the final product. It is a leap, however, to apply this result, as Professor Hausman does, to the telephone business, where the intermediate product (access) has a

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[32] "Declaration of Professor Jerry A. Hausman," September 26, 1997.

[33] See Franklin M. Fisher, "An Analysis of Switched Access Pricing and the Telecommunications Act of 1996," prepared on behalf of MCI Telecommunications Corporation, May 15, 1996.

regulated price and where (we hope) the local telephone company will not monopolize the downstream market (long distance).

191. The primary inhibition to the price decline identified by Professor Hausman is well explained in Professor Schmalensee's declaration in this matter on behalf of BellSouth. The basic thrust of Professor Hausman's argument is that the downstream operation, post merger, will face upstream marginal cost, whereas previously it had faced the elevated price charged by the upstream monopolist. The incentive then is to expand downstream output and to charge a lower price. Professor Schmalensee disposes of the application of this argument in the long-distance setting in prose of admirable vigor: "This naïve argument is flat-out wrong. Think about what happens if the long-distance affiliate were to take, say, 100 minutes away from a competitor. The LEC would no longer receive carrier access revenues from that competitor. If access charges were, say, 6 cents per minute, then the LEC would forego $6.00 in access revenues. To maximize profits, the LEC corporate parent must recognize that $6.00 in lost access revenues as an opportunity cost of having its long-distance affiliate carry the 100 minutes." Because of the opportunity cost, the long-distance affiliate will set a price comparable to existing prices and will not have an incentive to deliver significantly lower long-distance prices to the consumer.

192. The premise of Professor Hausman's argument is that access charges substantially exceed the economic cost of providing access. To the extent that the Bell would base retail long-distance prices on the economic cost of access rather than on the current regulated access charge, consumers would benefit. The best way to ensure maximum consumer benefit is to reduce the price of access across the board so that all sellers of long distance face genuinely lower access costs. The social benefit would be greatest if access charges were reduced and the dominant local carrier retained full incentives for cooperation by continuing the current restriction on controlling any long-distance carrier. Disregarding the adverse effects of lost cooperation between the local carrier and the long-distance carriers, it remains theoretically possible that the effect of control of a long-distance carrier by the dominant local provider may be to lower long-distance prices slightly, although this has not occurred in fact in non-Bell territories such as Connecticut where the dominant local incumbent also provides long-distance service.

193. Professor Hausman suggests, in effect, that permitting a local carrier to offer long-distance service is an end run around high regulated access charges.

In this respect, he is suggesting that the local carriers sacrifice the revenue they currently earn from access charges. To the extent that this revenue has been used in the past for social purposes such as supporting universal service, Professor Hausman is proposing to lower the revenue available for those purposes. A full accounting of costs and benefits would need to consider the effects of the loss of revenue or of replacing it from other sources.

194. Much of Professor Hausman's declaration is devoted to empirical investigations of the effect of control of a long-distance subsidiary by a dominant local carrier. He considers SNET, GTE, and Canada.

195. Professor Hausman concludes that SNET's long-distance prices are somewhat lower than AT&T's. He cites a regular peak price of 23 cents per minute and a discounted price of 20 cents for SNET. At the time (before reductions in July 1997), AT&T's regular price was 31 cents per minute. I am unable to reconcile Professor Hausman's statement about AT&T's discounted prices, however. AT&T has an actively promoted plan at 10 cents per minute, well below SNET's lowest discounted rate, even after adjustment for SNET's policy of billing by the second. I fail to see how he reaches the conclusion that SNET is cheaper.

196. Professor Hausman's comparison of GTE's and AT&T's prices is flawed in the same way. Again, Professor Hausman makes no mention of AT&T's actively promoted 10 cent rate, which is far cheaper than the GTE plan he discusses. Like SNET, GTE has positioned itself toward the top of the distribution of long-distance prices, whereas currently AT&T offers one of the better prices at 10 cents per minute.

197. Professor Hausman infers a dollar value of $7 billion per year for the national consumer savings from permitting dominant local telephone companies to control long-distance subsidiaries. This figure is calculated from his estimate of the difference between SNET and AT&T prices and ignores entirely the prices of the other major and minor long-distance carriers. As discussed above, I am skeptical of the evidence that SNET's prices are lower than other prices, and equally skeptical that SNET's role as a reseller of Sprint's services in Connecticut has had anything like Professor Hausman's estimated effect on the overall price of long distance. The figure also ignores the consumer welfare losses as SNET and other local carriers continue to withdraw cooperation from rival

long-distance companies, and the ultimate harm to long-distance competition. The figure should not be taken seriously.

198. In his comparison of the U.S. telephone market with those of other countries that have competition in long-distance service, Professor Hausman argues that not only have other countries chosen to allow the historical phone company to control a long-distance carrier, but that in Canada, the country most like the United States, the historical company's rates are lower than rates in the United States. None of the Canadian prices quoted by Professor Hausman is as low as AT&T's actively promoted 10 cents per minute. Because the prices Professor Hausman quotes are for the cheapest plan offered by each of the Canadian carriers, it appears that the correct conclusion is that long-distance service is cheaper in the United States. No Canadian customer enjoys the 10 cent rate available to any telephone subscriber anywhere in the United States.

199. Professor Hausman consistently restates Canadian dollar prices in U.S. dollars at the current exchange rate. An appropriate comparison would not be at the exchange rate, but rather in terms of purchasing power. It is well documented that exchange rates do not reflect purchasing power parities except on the average. It is also widely thought that the current value of the Canadian dollar is below purchasing power parity. The excess of Canadian long-distance prices over U.S. prices would be even larger, I believe, if stated in terms of purchasing power.

200. Professor Hausman analyzes the list prices of the major long-distance carriers in a framework similar to the one used by other economists engaged by the Bells. As I showed in Part IV, list prices have as little to do with the prices paid for most purchases in this industry as in many others. AT&T may put a list price of 27 cents on its product, but it gets about 12 cents on the average and customers with any significant long-distance volume have only themselves to blame if they pay more than about 10 cents.

201. Professor Hausman makes the statement, "Furthermore, AT&T did not pass on the recent (July 1997) access rate decreases to its one-rate plan customers or indeed, to any of their residential discount plan customers." (p. 23) It is true that AT&T's bargain One Rate Plus plan remained at 10 cents per minute at all times of the day. But recently, AT&T moved this plan from a status where it was provided only to customers who demanded it to a status where it is actively promoted through $100 switchover checks. Surely one of the reasons

that AT&T finds it profitable to promote such a low rate is that its costs have fallen. Further, as Section III showed, revenue per minute has been declining dramatically, faster than the decline in access charges. AT&T customers are continuing to enjoy rapidly declining prices, and one of the forces contributing to the rapid decline is diminishing access charges.

B. Professor Richard Schmalensee

202. Professor Schmalensee concludes that there is inadequate competition in long distance, that BellSouth's creation of a long-distance subsidiary would deliver benefits to the consumer, and that a dominant local carrier such as BellSouth does not have an incentive to interfere in the operations of its long-distance rivals.[34]

203. The evidence he cites of inadequate competition is first, that the rising market shares of smaller carriers is a sign of high profit margins; second, that AT&T's list prices have risen rather than fallen since 1993, and that this is true even after incorporating flat-rate plans into the analysis; and, third, that prices for residential service exceed cost.

204. Professor Schmalensee observes that AT&T's market share has fallen steadily, Sprint's and MCI's have been steady, and that smaller carriers have expanded. He reaches the carefully hedged conclusion that this pattern is "consistent with tacit price coordination among the Big Three carriers, or at least with a tight-knit oligopoly" (p. 6). I believe that Professor Schmalensee would agree that any pattern of trends in market shares could be consistent with any type of oligopoly model. For example, in a Cournot model, market shares are controlled by cost differences. Perhaps the smaller carriers have more favorable cost trends than do the established firms. I do not disagree with Professor Schmalensee's use of the word "consistent" but do point out that the trends in market shares are also consistent with a workably competitive market where muscular and active smaller companies are squeezing their way into the market by taking advantage of small cost differentials. The dogs are eating the dogs, and the smaller dogs are gaining weight. My analysis of the long-distance industry in

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[34] "BellSouth's Prospects for Success in the InterLATA Market," Declaration of Richard L. Schmalensee, August 18, 1997.

Part IV uses the kinds of data that most economists would rely upon to reach conclusions about the factors explaining changes in market shares, and, in my opinion, strongly supports the competitive model for that purpose.

205. Professor Schmalensee bases his conclusions about residential long-distance prices on the PNR "Bill Harvesting" data. In response to earlier section 271 filings by SBC and Ameritech, and as discussed above in Part IV, Section D, I have shown that these data are badly biased. Professor Schmalensee continues to rely on the biased PNR data without responding to this evidence of bias. I do not believe that the PNR data are usable to measure actual residential prices. Instead, I believe that the best way to measure those prices is by revenue per minute. As I showed in Section III, revenue per minute has fallen every year since 1985. It has fallen much faster than access charges and its level is far below theoretical calculations based on price plans and hypothetical distributions of customers among plans.

206. Professor Schmalensee's discussion of AT&T's One Rate plan has been rendered completely obsolete by the One Rate Plus plan, which prices all long-distance calls at 10 cents per minute. This plan was in existence when Professor Schmalensee wrote, but he ignored it. It cannot be ignored today, as AT&T is actively promoting the plan by mailing $100 checks to prospective customers. One Rate Plus is a sure bargain for any of the subscribers considered by Professor Schmalensee on pages 9 and 10 of his affidavit.

207. Professor Schmalensee observes that AT&T earns profits on its sales of long distance—its price is above its cost. Although he does not mention the fact, it is reasonably well known that MCI makes profits as well. In Part IV, I discussed profitability and market value. Although the long-distance market is workably competitive and delivers substantial and rising benefits to the consumer, it is not perfectly competitive, the standard Professor Schmalensee applies. No industry with intellectual property, brand-name capital, and the other intrinsic features of long distance could ever be expected to have marginal cost equal to price, no matter how much rivalry there is. Professor Schmalensee's findings of marginal cost somewhat below price do not have any implications for policy analysis in general or for the evaluation of the wisdom of permitting BellSouth to control a long-distance subsidiary in South Carolina in particular.

208. Professor Schmalensee considers low-usage customers, who are well known to pay higher rates per minute for long distance than do other customers. His

reliance on the biased PNR data to estimate the fraction of AT&T customers who pay list price probably results in a serious overstatement of this fraction. I believe it is not in dispute that AT&T has retained a substantial fraction of low-usage customers and that the carriers that have expanded since 1984 have done so in part by attracting higher-usage customers. Moreover, as Professor Schmalensee discusses, it is understandable that low-usage customers pay more per minute, because there are important fixed costs of serving a customer. In a competitive industry, prices to each class of customers will reflect the costs of serving the class, including the costs associated with adding a customer, even if those costs do not vary over the customer's usage.

209. My only disagreement with Professor Schmalensee in this area is his carefully qualified conclusion that BellSouth would offer better pricing to low-usage customers: "When entering the interLATA market, BellSouth *might* position itself as a low-priced carrier" (p. 21, emphasis added). But Professor Schmalensee's review of the comparison between BellSouth and AT&T emphasizes the similarities of the two carriers. He offers no reason why BellSouth would not make the same decisions as AT&T when confronted with the same business issue: How to price to low-usage customer with substantial fixed costs and low propensities to seek bargains. All the evidence I have seen suggests that BellSouth would find the same answer as AT&T has, to offer pricing reflecting the influences of these fundamental determinants.

210. Professor Schmalensee addresses the issue of overpriced access. As he notes, there is no dispute that access charges continue to exceed cost (p. 21). He disposes quickly of the suggestion that a dominant local carrier would use its access cost advantage to offer bargains in the long-distance market. As I noted earlier, the opportunity cost from foregone access sales inhibits this source of price reductions in long distance. I would add that experience with situations such as SNET confirms Professor Schmalensee's basic conclusion that dominant local carriers do not behave as if they had low costs. They set long-distance prices at the upper end of the distribution of long-distance prices.

211. Finally, Professor Schmalensee briefly considers the issue of cooperation between BellSouth and its long-distance rivals (p. 25). He appeals to Sibley and Weisman's analysis. As noted earlier in Part III, Section H, the correct inference from Sibley and Weisman is that conditions are virtually *never* present that would encourage BellSouth to lower the costs of its rivals. My full analysis of Sibley and Weisman's results—and the related findings of Nicholas

Economides—have been available to Professor Schmalensee for several months, but he disposes of the issue in a single paragraph with the mistaken statement that a dominant local carrier generally has the incentive to cooperate with its long-distance rivals.

C. Professor Richard Gilbert

212. Professor Gilbert finds important consumer value from the bundled services that BellSouth could offer if it controlled a long-distance subsidiary.[35]

213. Professor Gilbert's assertion of benefits from bundling local and long-distance service draws in part on evidence from a survey by J.D. Power and Associates.[36] The survey found that consumers generally preferred to buy a bundle of telephone services than to buy the components separately at the same total price. That is, the survey showed, for telephones, the equivalent of the proposition that shoppers would prefer to buy milk and eggs in the same store, rather than having to visit two separate stores. Were it not for other issues, the survey would support the general proposition that it is socially optimal to rely on the market to determine how products are bundled.

214. But there are other issues in the policy decision about permitting a dominant local carrier to control a long-distance subsidiary. Although the finding that consumers prefer bundling is plausible, it provides no basis for measuring the amount of benefit from bundling, in order to weigh the benefit against the costs of permitting a dominant local carrier to control a long-distance subsidiary.

215. As Professor Gilbert notes, other telephone companies, such as AT&T, MCI, Sprint, and WorldCom, are planning to offer bundled products. Their plans indicate that they perceive commercial benefits from bundling. Again, it is reasonable to conclude that the commercial benefits obtained by sellers can be traced back to benefits received by consumers. But the announced plans of the other carriers do not provide any basis for quantification of the benefits of bundling. The entry of these carriers into local service in order to provide bundled service is pro-competitive by any standard. Because no policy issue is

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[35] "Affidavit of Richard J. Gilbert," September 17, 1997.

[36] *Ibid.*, p. 10

raised by their offering of bundled services, there has been no reason to quantify the separate benefits of bundling—all aspects of their plans are good for the consumer. In the case of BellSouth in South Carolina—where lower density and longer loops will delay the emergence of local competition in comparison to other states—any benefits of bundling must be carefully weighed against the costs of reduced cooperation that certainly will follow from the dominant local carrier's control of a long-distance subsidiary.

214: Consumers will benefit from future competition in bundled services. The opening of local markets to effective competition is a strict requirement for that competition, else the dominant local carrier will be the single seller of bundled services. Consumers will be better off if the involvement of the local carrier in long distance is deferred until local competition develops.

216. To the extent that would-be local rivals can overcome the fierce opposition of the incumbent local carrier, the consumer will be offered bundled service even if BellSouth continues to be only a local carrier. The tone of Professor Gilbert's analysis is that letting BellSouth control a long-distance subsidiary in South Carolina is the only way to deliver consumers the benefit of bundling. The correct way to frame the policy issue, however, is different: Compare the welfare of the consumer with and without BellSouth in the long-distance business. With BellSouth in long distance, the services of the existing long-distance carriers will be degraded because BellSouth will lose its incentive to cooperate with them. Without BellSouth in long distance, consumers will face one fewer seller of bundled service but will enjoy the benefits of the high degree of cooperation between local and long-distance carriers that has existed since divestiture in 1984.

217. Professor Gilbert recognizes that common ownership is not the only way that carriers can offer bundled products.[37] To return to the analogy of a grocery store, rack jobbers actually handle many stocking and merchandising functions in grocery stores. These are independent businesses that operate under contracts with the stores. The store and its many rack jobbers collaborate to bundle 40,000 different products in the typical grocery store. The consumer receives the benefits of a huge volume of bundling, but common ownership is not needed to achieve those benefits.

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[37] *Ibid.*, p. 16

218. The evidence Professor Gilbert cites on the interesting issue of contract versus ownership is decidedly mixed. He notes (p. 15) that there are a number of large, successful organizations such as Electronic Data Systems and Andersen Consulting that provide billing and other services under contract. I believe that outsourcing of many business services is a growing, not a shrinking trend in the U.S. economy.[38] On the other hand, as Professor Gilbert observes, merger with common ownership has been selected over contractual relations in a number of instances in the telephone industry (p. 17). The evidence here is difficult to interpret because many mergers are motivated by the theory that the acquired company has been underperforming. In other words, the driving force of the merger is not the economies obtained by using ownership in place of contracts, but rather the theory that the managers of the acquiring company can create more value from the acquired company's assets. I conclude that the evidence still supports the view that most efficiencies of joint telephone product offerings can be achieved through contracts. These efficiencies should therefore not be viewed as potential benefits from permitting a dominant local carrier to control a long-distance subsidiary.

219. Professor Gilbert examines SNET as a laboratory of bundling. He confirms that SNET is a high-price long-distance carrier, charging 23 cents per minute during peak times (p. 19). By contrast, AT&T will carry the same call for 10 cents per minute. Again, low prices are not a benefit that Connecticut consumers have enjoyed as a result of SNET's involvement in long distance.

D. Professor D. John Roberts

220. Professor Roberts concludes that predatory pricing, broadly conceived, is unlikely in the long-distance business.[39] Concerns that a dominant local carrier might drive out its rivals in long distance are farfetched, in his view. In this analysis, he applies the modern theory of predatory pricing—a theory to which he was a major contributor. In place of the earlier crude analysis that concluded that predatory pricing is almost invariably irrational, the modern theory has

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[38] See "Brand-Name Knowledge," *Wall Street Journal*, October 13, 1997, p. A22, by Robert Reich, for an interesting discussion of Sara Lee's decision to become an assetless company that outsources all business functions except managing its brand name.

[39] "Affidavit of D. John Roberts," August 18, 1997.

identified circumstances where it could occur and would actually be beneficial to the predator.

221. I concur with Professor Roberts's conclusion that a local carrier is unlikely to drive an established long-distance carrier permanently out of the market. Whatever effect occurred in the short run, the local carrier could not disable an established long-distance carrier sufficiently to prevent its re-entry later, when the local carrier raised long-distance prices. Although, as I have explained earlier in this declaration, the local carrier has powerful methods for interfering with its long-distance rivals, it can deploy these methods just as effectively without sacrificing profits by setting low long-distance prices.

222. There is evidence in favor of Professor Roberts's view that he does not cite: Dominant local carriers have invariably proven to be high-price, not low-price, entrants to long distance, and to retain high prices in local toll when entry occurs. Rather than benefiting consumers by setting low prices, they position themselves at the top of toll-call pricing.

223. Concerns about strategic anti-competitive pricing may be a serious factor in limiting local competition, a topic Professor Roberts does not consider. If the dominant local carrier develops a reputation for setting selective low prices targeted directly against local entrants, the result could be a powerful barrier to entry.

E. Professor Glenn A. Woroch

224. As Professor Woroch explains, there is—on paper—a set of provisions intended to permit rivals to offer competing local service by reselling the incumbent's service or by leasing network elements. [40] But the entire history of the regulated telephone industry shows over and over that provisions that try to overcome strong incentives are not nearly as effective as they appear on paper. The dominant local carrier has extremely strong incentives not to cooperate with local rivals. The high level of cooperation needed to make local competition effective is a tremendous challenge and will take much more than provisions on paper. Moreover, the incumbent local carriers have launched an effective

[40] "Affidavit of Glenn A. Woroch," September 29, 1997.

campaign to subvert the provisions that Professor Woroch analyzes, as their successful efforts to inhibit uniform TELRIC pricing have demonstrated.

F. The WEFA Group

225. The WEFA group has carried out a study of the effect of BellSouth control over a long-distance subsidiary serving BellSouth's own customers.[41] The study suggests that there are substantial economic benefits from that control in comparison to reliance on competition among carriers not controlled by BellSouth. The study assumes, implicitly, that BellSouth will create a new long-distance subsidiary under its control, though I understand that some of the Bells propose to enter by reselling long-distance service of existing carriers, so the primary issue appears to be the Bell's control. In summary, WEFA concludes the following about the comparison: long-distance prices would fall by 5 percent per year over the next 5 years, productivity gains in the use of information services would rise by two percent per year over the same period, and labor participation rates would rise by 0.5 percent over the next 10 years because of the increased use of telecommuting.

226. WEFA's evidence about long-distance prices is defective and does not support the proposition that the creation of a long-distance subsidiary serving South Carolina customers under the control of BellSouth would result in anything like a 25 percent cumulative effect on prices. The study uses the same faulty measures of price—standard prices and the CPI—as the other BellSouth experts. As I explained in Part IV, the actual prices customers pay for long-distance services have declined dramatically, especially recently, and can be expected to decline even more in the near future, as both access charges and other costs continue to decline and productivity continues to rise. The data in Figures 2 and 3 of the WEFA study suggesting price *increases* are completely out of touch with reality.

227. WEFA's implicit analysis is that prices have risen while costs have declined—a symptom of lessening competition—and that the creation of a long-distance reseller under BellSouth's control would jolt the market into full

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[41] The WEFA Group, "The Economic Impact of BellSouth's Entry into InterLATA Long Distance Markets in South Carolina," March 1997.

competition. In fact, prices have fallen dramatically as costs have fallen. As Part IV showed, long distance shows all the signs of being a workably competitive industry. Furthermore, the evidence I reviewed earlier about SNET's role in its long-distance market hardly support the proposition that a local carrier will push prices downward by offering customers bargains. Rather, local telephone companies tend to price their products at the high end in all the markets they participate in, including long distance where permitted. WEFA's projection of a 25 percent effect of BellSouth's control over a long-distance subsidiary finds no support either in economic theory nor in the actual performance of telephone markets.

228. According to WEFA, productivity in the use of information services will improve as a result of the proposed change in long distance.[42] But their discussion of the sources of this improvement focuses exclusively on the Internet. It is likely, in my opinion, that the Internet will add to productivity as it matures. But the Internet has little to do with long-distance telephone service of the type that would be offered by BellSouth's proposed subsidiary. Essentially all access to the Internet is through the local network. The efficiency of the Internet derives from its use of broadband packet switching. The transport of Internet messages and files over long distances is already handled in a cheap and efficient way. It would be an overstatement for WEFA to suggest that BellSouth could make significant improvements in that area, and, in fact, the study does not make that claim. WEFA makes only vague assertions that the proposed role of BellSouth in long distance will increase productivity in the usage of information services by 2 percent per year. Nowhere does the study explain how productivity will be enhanced.

229. The controversial issue today with respect to the telephone system and the Internet is in local access. The Internet has expanded rapidly under a regime of zero access charges to users. Because access does involve costs, the efficient access charge is not zero, but a level reflecting cost. But, the Bells' record hardly supports the conclusion that they are encouraging more rapid penetration of Internet usage. The Bells have failed to redesign their networks to permit highly efficient access. According to Paul Misener, manager of telecommunications at

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[42] *Ibid.*, pp. 11-14.

Intel, "Rather than meeting the demand for Internet access, the phone companies want to suppress it by applying a surcharge."[43]

230. WEFA's third conclusion is that increased competition in the long-distance market will lead to increased telecommuting which will lead, in turn, to a 0.5 percent increase in the labor participation rate.[44] Yet, the benefits to telecommuting that WEFA attributes to competition in the long-distance market will most likely arise from increased competition in the local and intraLATA markets. As in Internet access, most telecommuting involves local and intraLATA telephone calls. The interchange of computer data for telecommuting takes place over packet-switched networks, not through regular long-distance service of the type that BellSouth proposes to resell.

231. In my opinion, the WEFA Study has no scientific value. Nothing in the study helps us understand how the price of long distance would be affected by BellSouth's creation of a long-distance subsidiary. And the study makes laughable errors in attributing improvements in productivity in areas where long-distance service in fact plays no role. To achieve the productivity benefits identified in the WEFA study, we need to bring more competition to local service.

VII. Conclusions

232. I can find no benefit from BellSouth's control of a long-distance subsidiary other than to BellSouth itself. The company will be able to obtain a substantial market share in South Carolina's long-distance market because of its ability to hobble its long-distance rivals. In addition, it will have the advantage of facing the true cost of access, which is less than the access charge paid by its rivals, though, as I explained earlier, this advantage is tempered by the opportunity cost when BellSouth takes a call away from a rival who depends on BellSouth for access. The result will be a reduction in competition in long distance and higher

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[43] "Access Providers, Baby Bells Fighting Over Internet Wealth," *The New York Times CyberTimes,* November 25, 1996.

[44] *The WEFA Study,* pp. 14 and 15.

prices to the long-distance consumer. Further, BellSouth's presence in long distance would lower incentives for entry of independent local carriers and inhibit the development of local competition. Local telephone prices would be higher as a result.

233. The Telecommunications Act relies on the principle of structural separation until there is sufficient local competition that the principle is no longer needed. This principle imposes a limitation on the Bells—that there may be no joint operation of local and long-distance service. I believe that the principle of structural separation is a sound one under current and near-future conditions, from the point of view of the welfare of the U.S. consumer. Structural separation does *not* reduce the number of sellers in the long-distance market. Nor does structural separation decrease consumer welfare.

234. I believe that consumers benefit from continued structural separation of local service and long distance. Contrary to BellSouth's experts' view, I believe that structural separation remains a valid principle for governing the telephone industry as long as there is not competition based on irreversible investment in local telephone service for all groups of customers.

235. Many discussions of the economic effects of permitting local telephone companies to control long-distance subsidiaries presume that another long-distance seller will improve competition and lower the price of long-distance services. The primary reason to be skeptical of this presumption is the evidence presented in Part IV showing the advanced degree of competition in the long-distance market. What could a local telephone company do that companies already in nationwide operation have not already done?

VIII. About the Author

236. I serve as Professor of Economics at Stanford University and also Senior Fellow at Stanford's Hoover Institution. I received a Ph.D. in economics from the Massachusetts Institute of Technology in 1967. I have been elected a fellow of the American Academy of Arts and Sciences and a fellow of the Econometric Society. I have published 7 books and numerous articles in several areas of

applied economics. I have extensive experience in the economics of telecommunications, computers, and software. Recently I served as an expert for the Department of Justice in its case against Microsoft and in its opposition to Microsoft's proposed merger with Intuit. Further information about my professional activities is in my *curriculum vitae*, which is appended to this declaration.

I declare, under penalty of perjury, that the foregoing is true and correct, to the best of my knowledge and belief.

Executed on October 19, 1997.

Robert E. Hall

June 1997

CURRICULUM VITAE

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Director, Research Program on Economic Fluctuations, National Bureau of Economic Research, since 1977
Member, Advisory Committee, Congressional Budget Office, since 1993
Member, Oversight Panel for Economics, National Science Foundation, 1989, and Advisory Panel for Economics, 1970-72
Member, Yale University Council Committee on Social Sciences—Policy, 1989-94
Member or Senior Advisor, Brookings Panel on Economic Activity, since 1970
Member, President's Advisory Committee on Productivity, 1981-82

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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Application of BellSouth Corporation,	)	CC Docket No. 98-121
BellSouth Telecommunications, Inc.	)	
and BellSouth Long Distance, Inc.	)	
for Provision of In-Region, InterLATA	)	
Services in Louisiana	)	

Exhibit F:
Reply Declaration of Robert Hall
on Behalf of MCI Telecommunications Corporation
in CC Docket No. 97-211